

Amendments to the Claims

The following listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

1 – 12. (Canceled)

13. (Original) A method of fabricating an optical interconnect device, the optical interconnect device including optical-electrical components for interfacing an optical and an electrical signal, comprising:

forming at least two alignment members on a substrate;

affixing the substrate to a base material with at least a portion of the optical-electrical components therebetween; and

segmenting the affixed substrate and base material into at least two portions of affixed substrate and base material, each portion having at least one alignment member.

14. (Original) The method of claim 13 wherein forming at least two alignment members comprises depositing material in the shape of at least two alignment members.

15. (Original) The method of claim 14 further comprising using a mold to shape the deposited material.

16. (Original) The method of claim 14 wherein the material is a metal deposited in a chemical vapor deposition process.

17. (Original) The method of claim 14 wherein the material is a curable material that bonds with the substrate as it hardens.

18. (Original) The method of claim 14 further comprising the step of depositing a preliminary layer on the substrate to promote adhesion of the at least two alignment members.

19. (Original) The method of claim 13 wherein forming at least two alignment members comprises molding the at least two alignment members together with the substrate.

20. (Original) The method of claim 13 wherein forming the at least two alignment members comprises machining the substrate to form the at least two alignment members.

21. (Original) The method of claim 13 where forming the at least two alignment members comprises etching the substrate using photolithography techniques to form the at least two alignment members.

22. (Original) The method of claim 14 wherein forming the at least two alignment members on the substrate comprises affixing at least two prefabricated alignment members to the substrate.

23. (Original) The method of claim 14 wherein forming the at least two alignment members on the substrate comprises affixing an overlay having at least two alignment members thereon to the substrate.

24. (Original) The method of claim 14 further comprising etching the substrate using photolithography techniques to form at least one recess; and
wherein the step of depositing material in the shape of at least two alignment members further comprises depositing material into the at least one recess in the shape of at least one of the at least two alignment members.

25. (Currently amended) A structure divisible into two or more optical communications devices, each of said two or more optical communications device devices having at least one optical electrical device, and each optical communications device adapted to join with a connector of an optical cable, the structure comprising:

a first substrate divisible into at least two portions and having at least two optical electrical devices thereon;

a second substrate divisible into at least two portions and affixed to the first substrate with the at least two optical electrical devices positioned therebetween, the second substrate having at least two optical components thereon; and

at least two alignment members formed on the second substrate, ~~[[and]]~~ each alignment member adapted to interface with the connector to align the connector in relation to the second substrate, at least one of the at least two alignment members being formed on each portion of said second substrate.

26. (Currently amended) The structure of claim 25, wherein at least one of the at least two alignment members is a prefabricated alignment member bonded to a portion of the second substrate.

27. (Original) The structure of claim 25 wherein at least one of the at least two alignment members is shaped from the second substrate.

28. (Original) The structure of claim 26 wherein at least one of the at least two alignment members is a microsphere.

29. (Canceled)

30. (Currently amended) The structure of claim ~~[[26]]~~ 25 wherein at least one of the at least two alignment members is formed on an overlay and affixed to the second substrate.

31. (Original) The structure of claim 25 wherein at least a portion of the second substrate is transparent and the second substrate further comprises at least two optical devices formed in the second substrate.

32. (Canceled)

33. (Canceled)